

Translation

PATENT COOPERATION TREATY

PCT/EP2003/013578



PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 02PA0137/PCT	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/EP2003/013578	International filing date (<i>day/month/year</i>) 02 December 2003 (02.12.2003)	Priority date (<i>day/month/year</i>) 14 December 2002 (14.12.2002)
International Patent Classification (IPC) or national classification and IPC B29C 44/34		
Applicant STANKIEWICZ GMBH		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (*sent to the applicant and to the International Bureau*) a total of 3 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input type="checkbox"/> Box No. VIII	Certain observations on the international application

Date of submission of the demand 12 June 2004 (12.06.2004)	Date of completion of this report 29 March 2005 (29.03.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2003/013578

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:

- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ The international application as originally filed/furnished

☒ the description:

pages _____ 1-12 _____, as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☒ the claims:

pages _____, as originally filed/furnished

pages* _____, as amended (together with any statement) under Article 19

pages* 1-13 received by this Authority on 27 July 2004 (27.07.2004)

pages* _____ received by this Authority on _____

☒ the drawings:

pages _____ 1/4-4/4 _____, as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (*specify*): _____

☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (*specify*): _____

☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/13578

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-7, 10-13	YES
	Claims	8, 9	NO
Inventive step (IS)	Claims		YES
	Claims	1-13	NO
Industrial applicability (IA)	Claims	1-13	YES
	Claims		NO

2. Citations and explanations

1. Reference is made to the following documents:

D1: EP-A-0 855 260

D2: DE-A-2 212 609

D3: US-B-6 361 723

D4: GB-A-1 566 946

2. INDEPENDENT CLAIM 1

2.1. The present application does not satisfy the requirements of PCT Article 33(1) because the subject matter of claim 1 does not involve an inventive step within the meaning of PCT Article 33(3). Document D1 is considered the prior art closest to the subject matter of claim 1. It discloses (cf. column 6, line 37 to column 7, line 9 and figure 1) a method for producing foamed polyurethane molded bodies wherein an expandable polyurethane reactive mixture is poured into a mold and said mold is evacuated and the reactive mixture expands after being poured into the mold, the gases released during the expansion process being suctioned off through at least one expansion opening that is disposed in at last one place at a maximum height in the upper half of the mold and that

can be closed by a valve when the foam entering the expansion opening causes a change in pressure, and the mold being ventilated and the molded body ejected once the foam has hardened, the temporal pressure pattern in the valve gap being detected and used to control the valve, the control of the valve being designed such that said valve closes immediately when the pressure in the valve gap falls as a result of the foam front infiltrating into the valve gap.

The subject matter of claim 1 thus differs from the known method in that the expansion opening is formed by a needle valve and the valve gap is formed by a valve capillary and in that the controlled valve is the needle valve.

The problem to be solved by the present invention can thus be seen as that of preventing polyurethane from advancing into the negative pressure system (cf. page 6, lines 19-21).

The solution proposed in claim 1 of the present application cannot be considered inventive (PCT Article 33(3)) for the following reasons:

Document D2 (cf. page 5, paragraph 3 to page 6, paragraph 1) describes the same advantages as the present application with respect to the features wherein the expansion opening is formed by a needle valve and the valve gap is formed by a valve capillary and the controlled valve is the needle valve. A person skilled in the art would therefore consider the incorporation of said features into the method described in D1 to be a conventional measure in solving the problem of interest.

3. INDEPENDENT CLAIM 8

The present application does not satisfy the requirements of PCT Article 33(1) because the subject matter of claim 8 is not novel within the meaning of PCT Article 33(2). Document D2 discloses (cf. page 5, paragraph 3 to page 6, paragraph 1 and figures 5-9; the references in parentheses are to D2): a device for carrying out the method according to one of claims 1 to 7, comprising a mold with an upper mold region, a suction opening for evacuating air and a device for ventilating the mold as well as at least one expansion opening in at least one place at maximum height in the upper mold region at which at least one valve that is controlled by changes in pressure is arranged, said expansion opening being formed by a valve capillary (18) that can be closed by a needle valve (20) and the needle valve being controlled such that the closing function of said needle valve is triggered by a fall in pressure in the valve capillary caused as a result of the foam front infiltrating into the valve capillary (18) and such that said valve capillary (18) closes immediately.

4. DEPENDENT CLAIMS 2-7 AND 9-13

Dependent claims 2-7 and 9-13 do not contain any features that, in combination with the features of any claim to which they refer back, meet the PCT requirements for novelty and inventive step. Documents D1 to D4 describe the same advantages with respect to these features as the present application. A person skilled in the art would therefore consider the incorporation of said features into the method

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/13578

described in D1 and the device described in D2 to be a conventional measure; see documents D1 to D4 and the corresponding text passages cited in the search report.

5. Contrary to PCT Rule 5.1(a)(ii), the description does not cite documents D1 and D2 or indicate the relevant prior art disclosed therein.
6. The reference sign "7" in claim 9 should be "8".
7. Claims 1-13 satisfy the PCT requirements with respect to industrial applicability.